

THE MOGHUL EMPERORS OF INDIA AS NATURALISTS AND SPORTSMEN

BY

SALIM A. ALI

PART II

(With four plates)

(Continued from page 861 of Vol. XXXI)

THE WILD ASS (*Equus onager indicus*)

According to Abul Fazl¹ the Wild Ass was hunted in the Sarkar of Tattah (Sind). He gives an account of a hunt by the Emperor Akbar (*circa* April, A.D. 1571) which took place at Harhāri near the River Sutlej (in the Punjab) as follows: "The scouts having reported that there was a herd of wild asses (*Gorkhar*), the sovereign proceeded to hunt them attended by three or four special huntsmen. When he came near the plain, he dismounted and proceeded on foot. At the first shot he hit an ass and the rest of the herd fled far away at the report of the gun. That Divine World Hero took his piece in his hand and proceeded rapidly on foot over the burning sand attended by the same three or four huntsmen. He soon traversed the plain and came up with the herd and killed one after the other with his gun; he continued to follow them up and on that day he shot thirteen wild asses. Whenever he killed one the others went farther off than at first (before)." The chronicler tells us that Akbar followed this herd till thirst brought about such exhaustion that he lost the power of speech.

One of the items appearing on the list of game shot by Jehangir in the course of a *qamargah* hunt at Girjhāk (in the neighbourhood of Kalpi?) is "ten Wild Asses".² By the Emperor's orders the largest and strongest of these was weighed and found to be 9 maunds 16 seers equal to 76 Persian (*Vilayeti*) maunds (equivalent to 324½ lbs.). Regarding the qualities of its flesh as a table delicacy Jehangir observes: 'Though the flesh of the wild ass is lawful food (*halal*) and most men like to eat it, it was in no way suited to my taste.'

THE YAK (*Bos grunniens*)

Abul Fazl mentions³ that this animal was found in the northern mountainous parts of the Subah of Kumaon. Further on he describes the animal as follows: "The Yak approximates to the domestic cow, but of its tail is made the '*kutas*' or fringed tassel and many they join together."

¹ *Ain*, vol. ii, p. 338.

² *Jeh.*, vol. i, p. 83.

³ *Ain*, vol. ii, p. 280.

Jehangir records ¹ that one day two Yaks out of the offerings of the Zamindar of Tibet were brought before him and regarding these he observes: "All the limbs are covered with wool which properly belongs to animals in a cold country. For instance the *Rang* goat (Ibex) which they brought from the country of Bakkar (Sind) and the hill country of the Garmsir (Afghanistan) were very handsome but had little wool, and those that were met with in these hills (Tibet), on account of the excessive cold and snow are covered with hair and ugly. In form and appearance they (the Yaks) closely resemble the buffalo."

Jehangir is here doubtless, differentiating between the close-haired Ibex of the Sind Hills and its congener the Himalayan Ibex of the high altitudes of the Central Asian region.

According to Blanford the Yak in the wild state is only found within Indian limits in Northern Ladak in the neighbourhood of Chang Chenmo. Hodgson described it as occurring in the northern region of Nepal in the immediate vicinity of the snows. It is possible that the Subah or province of Kumaon in Akbar's day extended into Tibet which was a dependancy of the Moghul Empire.

THE WILD BUFFALO (*Bos bubalus*)

Babur describes ² the animal thus: "It is much larger than the common buffalo. Its horns go back like those of the common buffalo, but not so as to grow into the flesh. It is a very ferocious and destructive animal."

Babur's view is upheld by Blanford and by most sportsmen of the present day that the wild buffalo is by far the most savage and the holdest of Indian Bovidæ.

The habitat of this beast at present is mainly Nepal, Assam, Bengal, Orissa and certain portions of Central India where it is locally distributed. In Akbar's time, according to his historian³ wild buffaloes were numerous in Oudh. "When the plains are inundated," he informs us, "the animals take to high ground where people find sport in hunting them. Some of the animals remain all day in the water and only at night approach the dry ground and breathe in freedom."

According to the same author ⁴ various methods were employed in hunting the wild buffalo, the commonest being to decoy a bull by means of a tame cow on heat and to entangle him with nooses slipped round his legs by hunters lying in ambush.

MOUNTAIN SHEEP (*Oriah* or *Burhel*?)

Jehangir records ⁵ that in the course of two *Qamargah* hunts, one at Girjhāk and the other at Nadīnā (somewhere in the neighbourhood of Kalpi?) one hundred and eighty mountain sheep were killed. The Emperor ordered a large ram to be weighed and it came to 2 maunds 3 seers (Akbari) equal to 70 Persian (Vilayeti) maunds which would be equivalent to 71½ lbs. It will be noted that the Moghul Emperors invariably appraised their game by weight,

¹ *Ibid.*, vol. ii, p. 151.

² *Babur*, vol. ii, p. 211.

³ *Ain*, vol. ii, p. 125.

⁴ *Ain*, vol. i, p. 293.

⁵ *Jeh.*, vol. i, p. 83.

only in a very few instances is any attention paid to the length of horn and other dimensions so dear to the heart of the modern sportsman.

Continuing on the subject, Jehangir observes: "I have frequently heard from hunters and those fond of the chase that at a certain regular time a worm develops in the horn of the mountain ram, and this causes an irritation which induces the ram to fight with its hind, and that if he finds no rival he strikes his head against a tree or rock to allay the irritation. After inquiry it seems that the same worm appears in the horn of the female sheep, and since the female does not fight, the statement is clearly untrue."

The reference no doubt is to the larva of the parasitic fly *Æstrus ovis* L. which occurs in sheep causing the well-known giddiness.

THE 'RANG' OR IBEX (*Capra* sp.)

Jehangir¹ thus describes an ibex shot and brought to him: "It is like a mountain goat and there is a difference only in its horns. The horns of the 'Rang' are bent (backwards) and those of the goat (obviously meaning Markhor) are straight and convoluted."

In regard to 24 ibex which were captured alive in the course of a *Qamargah* hunt near Kabul, the Emperor observes²: "I had never till now seen a *Rang* antelope alive. It is in truth a wonderful animal of beautiful shape. Although the Black-buck of Hindustan looks very finely made, the shape and fashion and appearance of this antelope is quite a different thing. They weighed a *Rang* and it came to 2 maunds 10 seers (Akbari) (equal to 77½ lbs.). The *Rang* although of this size (i.e., heavy) ran so that 10 or 12 swift dogs were worn out and siezed it with a hundred thousand difficulties."

Jehangir describes his experiment of crossing the ibex with a Barbary goat in the following terms. The translation speaks of the former animal as "Markhor" but from the sketches of the goats, both parents and hybrids, made at the time (A.D. 1619) under the Emperor's orders it is apparent that the ibex and not the markhor was the species experimented with. Says Jehangir,³ "At Ahmedabad I had two markhor(?) goats. As I had not a female in my establishment to pair with them, it occurred to me that if I could pair them with Barbary goats which they bring from Arabia, especially from the port of the city of Darkhar⁴ young of their form and qualities might be obtained. In short I paired them with seven Barbary ewes (she-goats) and after six months had elapsed each of the latter had a young one at Fatehpur. There were four females and three males very pleasing in appearance, of good shape and good colour. In their colour, those kids which resembled the male were dun coloured with black stripes on their backs. . . . Of their liveliness and laughable ways and their manner of gamboling and leaping what can be written? Some of their ways are such that the mind derived uncontrolled pleasure from looking at them. . . . When one month or even 20 days old, they would leap

¹ *Jeh.*, vol. i, p. 109.

² *Ibid.*, p. 121.

³ *Ibid.*, vol. ii, p. 88.

⁴ The ancient Dhafar on the south coast of Arabia, known as Mirbat.



SKETCHES OF IBEX-GOAT HYBRIDS (SEE 'IBEX')
(Painted A.D. 1619; collection of M. Denotte, Paris.
By courtesy of the Publishers 'Indian Painting
under the Moghuls,'—Percy Brown.



NILGAI.
(From a Moghul painting in the Prince of
Wales Museum, Bombay.)



MALLARD AND NIGHT HERON (Painted A.D. 1630; Album of Prince Dara Shikoh; India Office Library)
By courtesy of the Publishers, '*Indian Painting under the Moghuls*.'—Percy Brown.

upon high places and throw themselves on the ground in a way that if any other but a kid were to do so, not one limb would be left entire. As it pleased me I ordered them always to be kept near me, and I gave each of them an appropriate name. I am much delighted with them and pay much attention to bringing together markhor (ibex) males and well-bred she-goats. I desire to have many young ones from them that they may become well known among men. After their young shall have paired, most probably more delicate ones will be obtained. One of their peculiarities is that ordinary kids, immediately they are born and until they begin to suck, make a great bleating, whilst these on the contrary make no sound and stand quite contented and without wailing. Perhaps their flesh would be very pleasant to the taste."

The agility of the ibex appears to have particularly excited the Emperor's amazement. He mentions¹ in regard to a tame ibex fawn eight days old that "it jumped down from the terrace of the palace which is 8 gaz (20 ft.) in height on to the ground and began to leap about, no sign of injury or pain being perceptible in it."

It is interesting to compare Jehangir's ibex-goat hybrids in the plate here reproduced with the photo illustrating a similar cross which appeared with a note by Col. A. E. Ward on page 519 of vol. xxxi of the Society's Journal.

THE MARKHOR (*Capra falconeri*)

I have no doubt that the animal referred to as "Mountain Goat" in Jehangir's memoirs is no other than this. The Emperor mentions that as compared with the *Rang* (ibex) whose horns are bent backwards, the horns of this animal were straight and convoluted. This clue alone would suffice to establish its identity. Jehangir² continues on the subject. "I found the flesh of the Mountain Goat more delicious than of all wild animals; although its skin is exceedingly ill-odoured, so much so that even when tanned the scent is not destroyed. I ordered one of the largest of the Hill Goats to be weighed; it was 2 maunds and 25 seers equal to 21 foreign (Persian or Vilayeti) maunds."

The weight would be equivalent to 90½ lbs.

THE NILGAI OR BLUE BULL (*Boselaphus tragocamelus*)

The first Moghul emperor to refer to this animal was Babur, who described it in his Memoirs³ thus: "Its height is equal to that of a horse. It is somewhat slender. The male is bluish whence it is called the *Nil-gau* (Blue Ox). It has two small horns and on his neck has some hairs, more than a span in length, which bears much resemblance to the mountain-cow's (yak) tassels.⁴ Its tail is like the bull's. The colour of the female is like that of the 'Gawazen' deer (Red Deer)."

All the Moghul emperors appear to have been extremely fond of hunting the Nilgai. Jehangir in particular was devoted to it, and

¹ *Jeh.*, vol. ii, p. 204.

³ Vol. ii, p. 211.

² *Ibid.*, vol. i, p. 83.

⁴ Known as *kutas* or *qutas*.

makes repeated references to the sport in his memoirs. I give an account of one such hunt in the Emperor's own words which will suffice our purpose. He writes: "On this day (in A.D. 1610) was killed a Nilgau of the weight of 9 maunds and 35 seers (equivalent to 340½ lbs.). The story of this nilgau is written because it is not devoid of strangeness. In the past two years during which I had come to this same place to wander about and hunt, I had shot at him each time with a gun. As the wounds were not in a fatal place, he had not fallen but gone off. This time I again saw that nilgau in the hunting ground and the watchman recognized that in the two previous years he had gone away wounded. In short I fired at him again three times that day. It was in vain. I pursued him rapidly on foot for 3 kos but however much I exerted myself I could not catch him up. At last I made a vow that if this nilgau fell I would have his flesh cooked, and for the sake of Khwājā Muin-ud-dīn (who was Jehangir's patron saint) would give it to eat to poor people. I also vowed a muhr (gold mohur) and a rupee to my revered father. Soon after this the nilgau became worn out with moving and I ran to his head and ordered them to make it lawful (cut its throat in the name of Allah) on the spot, and having brought it to the camp I fulfilled my vow as I had proposed. They cooked the nilgau, and expending the muhr and rupee on sweets, I assembled poor and hungry people and divided these among them in my own presence.

Two or three days afterwards I saw another nilgau. However much I exerted myself and wished he would stand still in one place so that I might fire at him, I could get no chance. With my gun on my shoulder I followed him till near evening until it was sunset and I despaired of killing him. Suddenly it came across my tongue "Khwājā, this nilgau is also vowed to you." My speaking and his sitting down were at one and the same moment. I fired at him and hit him and ordered him like the first nilgau to be cooked and given to the poor to eat."¹

From the above account it will be seen that unlike so many potentates of the present day, the Moghul emperors spared no personal exertion in pursuit of sport.

The killing of female game was apparently not looked upon as unspornstmanlike in Jehangir's time. He tells us that he once shot a female nilgau from the stomach of which two fully formed foetuses were obtained. "As I had heard," writes the Emperor, "that the flesh of nilgai fawns was delicate and delicious, I ordered the royal cooks to prepare a *dupiyaza* (a kind of rich fricassee,²) and he remarks that "certainly it was not without flavour."

THE FOUR-HORNED ANTELOPE (*Tetracerus quadricornis*)

Jehangir³ writes: "On the road to the village of Qāsim-khēra in the Subah (province) of Mālwa a white (probably meaning pale brown) animal was killed which resembled the *Kotah-payeh* (Hog Deer); it had four horns, two of which were opposite the extremities of its eyes and two finger-breadths in height, and the other two

¹ *Jeh.*, vol. i, p. 189.

² *Ibid.*

³ *Jeh.*, vol. i, p. 352.

norns 4 finger breadths towards the nape of the neck. These were 4 finger breadths in height. The people of India call this animal *Dūdhadhārit*. The male has four horns and the female none. It was said that this kind of animal had no gall-bladder, but when they looked at its intestines the gall-bladder was apparent, and it became clear that this report has no foundation."

One of the Hindustani names for the four-horned antelope is *Doda*, which may be an abbreviated form of that mentioned by Jehangir.

THE INDIAN ANTELOPE OR BLACK BUCK (*Antelope cervicapra*)

In dealing with the fauna of Hindustan, Babur¹ refers to this animal in the following terms: "There is a species of deer that resembles the male *hunch* or *jiran*.² Its back is black, its belly white, its horns longer than those of the *hunch* and more crooked. The Hindustanis call it *kālhāreh*. The word was probably *kāla hiran* (black deer), which they have corrupted into *kālhāreh*. The female is white (meaning doubtless, pale brown). They take the deer by means of this *kālhāreh*. They make fast a running net to its horns and tie a stone larger than a football to its leg, that after it is separated from the deer it may be hindered from running far. When the deer sees the wild *kālhāreh* it advances up to it presenting its head. This species of deer is very fond of fighting and comes on to butt with its horns. When they have engaged and pushed at each other with their horns, in the course of their moving backwards and forwards, the net which has been fastened to the tame one's horns gets entangled in those of the wild deer and prevents its escape. Though the wild deer uses every effort to flee, the tame one does not run off and is greatly impeded by the stone tied to its leg which keeps back the other also. In this way they take a number of deer which they afterwards tame. They likewise take deer by setting nets. They breed this tame deer to fight in their houses. It makes excellent battle."

Writing in the reign of the Emperor Akbar, the historian Abul Fazl, after enumerating a number of methods then in vogue for hunting and capturing black buck, the most popular of which has been so graphically described by Babur and is still employed, informs us that regular deer studs were maintained where black buck were bred and trained as decoys for catching and hunting wild antelope.

While on the subject of black buck, Jehangir recounts an incident which he says "has been written because it is not void of strangeness. At Chāndwālah I had wounded in the belly a black antelope. When wounded a sound proceeded from him such as I have never heard from any antelope except in the rutting season. Old hunters and those with me were astonished and said they never remembered, nor had they heard from their fathers that such a voice issued from an antelope except at the rutting season."

¹ *Babur*, vol. ii.

² It has been suggested that this may be either *Gazella subgutturosa* or *Saiga tartarica*.

He further relates¹ that while hunting in the pargana of Karnal (Punjab) with about 30 of his huntsmen (*circa* 1618 A.D.) they came in sight of a black buck with some does. "We let loose a decoy antelope to fight him. They butted two or three times and then the decoy came back. A second time I wanted to put a noose on its horns and let it go that it might capture the wild one. Meanwhile the wild antelope in the excess of his rage, not looking at the crowd of men (i.e., unmindful), ran without regard to anything, and butting the tame buck two or three times, fought with it till it fled. The wild antelope thereupon made its escape."

The traveller Mons. de Thevenot, who visited India during the regime of Aurangzebe, writes of the black buck and the methods of capturing it as follows:—"The Indian Antelope are not altogether like those of other countries; they have even a great deal more courage, and are to be distinguished by their horns. The horns of the ordinary antelope are greyish, and but half as long as the Horns of those in the Indies which are blackish and a large Foot and a half long. The Horns grow winding to a point like a screw; and the Faquirs and Santons carry commonly two of them pieced together; they are armed with iron at both ends, and they make use of them as of a little staff.

When they use not a tame Leopard for catching of Antelopes, they take with them a male of the kind that is tame, and fasten a Rope about his Horns, with several nooses and doubles, the two ends whereof are tied under his belly; so soon as they discover a Heard of Antelopes, they slip this male and he runs to join them. The Male of the Heard advances to hinder him, and making no other opposition but playing with his horns, he fails not to be pestered and entangled with his rival, so that it being uneasy for him to retreat, the Huntsman cunningly catches hold of him and carries him off; but it is easier to catch the male than the females."

Here again we find that the favourite method of capturing black buck was the same as employed in Babur's time, over a century previously. The dodge as practised to-day shows very little modification.

THE CHINKARA (*Gazella bennetti*) OR MUNTJAC (*Cervulus muntjac*)?

Sir Lucas King, the annotator of Erskine's translation of Babur's Memoirs, in a footnote conjectures that the animal described by the Emperor in the following words may be a Chinkara. If this view is correct, it appears curious that Babur should not have remarked upon the similarity of this animal to the Persian Gazelle (*Gazella subgutturosa*) which was evidently familiar to him (cf. Black Buck) and closely allied to this species. Babur states:—"There is on the skirts of the mountains another deer which is smaller; it may be equal in size to a sheep of a year old."

In view of the somewhat vague account, I think it may be permissible to hazard a guess that possibly the Muntjac is what is meant.

¹ *Jeh.*, vol. ii, p. 42.

RED DEER (?)

The identity of this animal is uncertain. According to Jehangir¹ they were plentiful in the hills of Rohtas (Punjab) ? and were found nowhere else in Hindustan except at Girjhāk and Nandāneh (near Kabul ?) The Emperor writes :—" I ordered them to catch and keep some of them alive in order that possibly some of them might reach Hindustan for breeding purposes."

Unfortunately no further records are available regarding this proposed introduction of the deer.

Is it possible that the Emperor is here referring to the Eastern Red Deer, misnamed the Maral, (*Cervus elaphus maral*) whose range extends from the Caucasus to Northern Persia and may have in Babur's day included Afghanistan and the neighbouring provinces of the Punjab ?

The only mention of Sambar (or Barasinga ?) made in Jehangir's notes is in his game register. In the list of game killed by him which appeared with the first part of this article, one of the items is *Maka* which for the reason stated in my footnote, may refer to either to Sambhar or Swamp Deer (*Barasinga*). As mentioned by Blanford, *Māhā* is the Hindi name for the Swamp Deer and *Muhā* the Terai for Sambar.

THE HOG DEER (*Hyelaphus porcinus*)

Babur describes this deer which he calls *Kotah paicheh* (i.e. "Shortlegged") as follows : " Its size may be equal to that of the white deer. Its forelegs as well as its thighs are short whence its name. Its horns are branching like those of the *gawazen* (Red Deer) but less. It is a bad runner and therefore never leaves the jungle."

Akbar's chronicler, Abul Fazl, mentions² that the sport of hunting this deer was much pursued in the Sarkar of Tattah—the present Sind. The animal is still plentiful in the tamarisk forests in the Indus and canal areas of that province and the zamindars display considerable fervour and ingenuity in hunting it.

THE MUSK DEER (*Moschus moschiferus*)

Abul Fazl³ refers to this little animal in his Fauna of Hindustan thus : " The deer from which the musk is taken is larger than a fox, and his coat is rough. He shows two tusks or protruberances in place of horns. They are common in the northern mountains." In regard to its distribution the same author observes⁴ that the Musk Deer was found in the Subah of Kumaon.

The Emperor Jehangir mentions⁵ that while in Kashmir, the Zamindar of Tibet brought him a Musk Deer as offering. About this he writes : " As I had not tasted its flesh, I ordered it to be cooked ; it appeared very tasteless and bad for food. The flesh of no other animal is so inferior. The musk bag when fresh has no scent, but when it is left for some days and becomes dry it is sweet scented. The female has no musk bag."

¹ *Jeh.*, vol. i, p. 129.² *Ain*, vol. ii, p. 338.³ *Ain*, vol. iii,⁴ *Ain*, vol. ii, p. 280.⁵ *Jeh.*, vol. i, p. 151.

It is interesting to compare Jehangir's verdict on the flesh of this species as an article of food with Blandford's, who considers it as excellent and free from any musk flavour.

THE INDIAN WILD BOAR (*Sus cristatus*)

According to Abul Fazl¹ the Wild Boar was much hunted in the Sarkar of Tattah (Sind) where it is still plentiful and a serious pest to cultivation.

Jehangir mentions² that two pigs formed part of his bag in a *Qamargah* hunt which took place at Rawalpindi.

Sir Thomas Roe, the English Ambassador from James I to the court of Jehangir, writes in his journal³ that on one occasion the king returning from a hunt "sent me a wild boar so large that he desired the tusks might be sent him back for their extraordinary size, sending word he had killed it with his own hand and bidding me eat it merrily."

Some time later, he again notes: "The king returning from hunting sent me a wild boar."

THE GANGETIC DOLPHIN (*Platanista gangetica*)

The animal referred to by Babur as *Khūk-e-ābi* is doubtless this species. From the fact that he describes it along with his crocodiles and fishes, it may be doubted if the Emperor realized its true position. Of course, by analogy of habitat alone it has at least as much right to be classed with the fishes as Babur's Flying Fox had to be with his birds.

The cetacean is thus described: "It is found in all the rivers of Hindustan. It springs up from the water with a jerk, puts up its head and plunges it down again, leaving no part of its body visible except the tail. The jaw of this animal too is like that of the crocodile. It is long and has the same kind of ranges of teeth; in other respects its head and body are like that of a fish. While playing in the water it resembles a water bag (*mushak*). The *khūk-e-ābi* (water hogs) that are in the River Saru (the Sirju or Gogra) while sporting leap right out of the water. This animal too resembles the fish in never leaving the water."

BIRDS

THE CROW (*Corvus splendens* ssp. ?)

In dealing with the birds of his new dominions, Babur describes⁴ what he calls the "*Alā-khūrgeh* of Hindustan" as follows: "It is slenderer and smaller than the *Alā-khūrgeh* of my native country and it has some white (? whitish) on the neck." Babur undoubtedly refers to the Hooded Crow (*Corvus capellanus*) in speaking of the crow of his country.

In a footnote, Sir Lucas King suggests that the bird referred to may be the Carrion Crow (*Corvus cornix sharpi*) but as this is by

¹ *Ain*, vol. ii, p. 338.

² *Pinkerton's Travels*, vol. viii.

³ *Jeh.*, vol. i, p. 129.

⁴ *Babur*, vol. ii, p. 221.

no means a common species (being a somewhat rare visitor to the extreme north-west of India only) and besides has no grey or white about the neck which is glossy black, I am inclined to believe it highly probable that Babur's bird is no other than our vulgar friend the House Crow—possibly *C. s. zugmeyer* the Sind Crow, which has a particularly pale, almost whitish neck.

THE TREE PIE (*Dendrocitta rufa* ssp.?)

"Another is the *Aakeh* of Hindustan; they call it *mita*. It is a little smaller than the common *aakeh* (magpie) which is particoloured black and white, while the *mita* is particoloured brown and black."

THE GREEN MAGPIE (*Cissa chinensis chinensis*)

Babur's description of what may possibly be this bird is very vague. He compares it in appearance to the *Shigraq* which according to King, is the Arabic name for the Green Magpie, and says, "It lives close among and about trees, and may be about the size of a *shikrak*. It is green-coloured like the parrot."

Abul Fazl's reference to it is somewhat more definite. Among the birds found in the Sarkar of Sylhet (Assam) he mentions one as the *Sherganj* and says, "It is of the same kind (as the Racket-tailed Drongo) but its beak and legs are red; in imitating sounds it matches the other, and pursues sparrows and the like and eats them." Among the vernacular names of this bird in the *F.B.I. Birds*, vol. i, 1st and 2nd editions, both Oates and Stuart Baker give *Sirganj* as the Bengali. The latter states that its food consists of insects, small unfledged birds, etc.

THE RACKET-TAILED DRONGO (*Dissemurus paradiseus* ssp.?)

Abul Fazl² describes this bird from the Sarkar of Sylhet (Assam) thus: "The *Bhangrāj* is a bird of black colour with red eyes and a long tail. Two of the feathers extend to the length of a *gaz*. They are snared and tamed. It catches the note of any animal that it hears and eats its flesh."

THE SCARLET MINIVET (*Pericrocotus speciosus*)

Another bird which Babur compares in size to the *Sandulaj-mamula*, (which according to King is the Arabic for Wagtail) is probably this bird. The Emperor says "It is of a beautiful red, and on its wings has a little black."

THE DIPPER

Jehangir writes in Kashmir as follows: "I rode to see Sukh Nag.³ It is a beautiful summer residence (*Ilaq*). The waterfall is in the midst of a valley and flows down from a lofty place.

¹ *Babur*, vol. ii, p. 222.

² *Ain*, vol. ii, p. 125.

³ Perhaps this is the Shakar Nag of Jarrett (*Ain*, vol. ii, p. 361). The Sukh Nag River is mentioned by Laurence, 16. It may also be the waterfall mentioned by Bernier who says Jehangir visited the place and had a rock levelled in order to see properly.

There was still ice on its sides. . . . In this stream I saw a bird like a *Saj*. The *Saj* is of a black colour with white spots, while this bird is of the same colour as a bulbul (brown) with white spots, and it dives and remains for a long time underneath and then comes up from a different place. I ordered them to catch and bring two or three of these birds that I might ascertain whether they are waterfowl and were web-footed, or had open feet like land birds. They caught two and brought them. One died immediately and the other lived for a day. Its feet were not webbed like a duck's. I ordered Nadir-ul-asr Ustad Mansur (the celebrated animal painter) to draw its likeness. The Kashmiris call it *Galkar* that is 'Water *Saj*'."

This bird is either the Kashmir Dipper (*Cinclus c. cashmeriensis*) or the Indian Brown Dipper (*Cinclus pallasi tenuirostris*). The *Saj* to which it is compared may be the Spotted Forktail. Unfortunately I have no access to a reproduction of Al Mansur's painting referred to. This would doubtless have set the matter at rest.

STARLINGS, MYNAHS, ETC.

Babur mentions¹ the *Shārak* which he says "abounds in the Lamghanat and everywhere lower down over the whole of Hindustan. The *Shārak* is of different (various) species. One is that which is found in great numbers in the Lamghanat. Its head is black, its wings white, its size is rather larger than the *Chughur* and slenderer. It learns to speak."

In a footnote to this, King says: "The Persian has *Jāl* which is the Bokhara lark—*Melanocorypha torquata*—a common cage bird in India. *Chughur* is a large species of lark. The bird referred to here must be some sort of starling, possibly *Sturnus humii*." I can hardly imagine that King is correct in his conjecture. I have never heard of *Sturnus humii* sporting white wings! Mrs. A. S. Beveridge, in her translation of the *Memoirs*, remarks "*Chughur-chug* in E. D. Ross's *Polyglot List of Birds* (p. 314) is the Northern Swallow. The description allows it to be *Sturnus humii*—the Himalayan Starling." (??)

Babur proceeds: "There is another sort which they call *Pindāweli*. They bring it from Bengal. It is all black. It is much larger than the other *Shārak*. In its two ears are yellow leathers which hang down and look very ugly. They call it the *Myna*. It learns to speak well and fluently."

This bird is obviously the Hill Mynah (*Eulabes intermedia*), a favourite cage bird, talker and mimic.

"There is another kind of *Shārak* a little slenderer than this last (the Persian adds, they call it *Wan Shārak*). It has red round the eye. This kind does not talk." King suggests in a footnote that this is possibly *Calornis chalybeius*—the Glossy Starling or Tree Stare. It is possible that his surmise may be correct though this species has no red round the eye, unless the irides are meant. To my mind the description suggests *Acridotheres ginginianus*, the Bank Myna.

¹ Babur, vol. ii, p. 216

THE BAYA (*Ploceus baya*)

Abul Fazl says, "The Baya is like a wild sparrow but yellow. It is extremely intelligent and docile; it will take small coins from the hand and bring them to its master, and will come to call from a long distance. Its nests are so ingeniously constructed as to defy the rivalry of clever artificers."

THE SPARROW

Abul Fazl remarks upon the scarcity of these birds in the Province of Kashmir, and ascribes it to the general use in that country of pellet bows fitted with bow strings. Some doubt may be pertinently expressed as to the bird referred to in this note.

One of Akbar's diversions was to catch sparrows by the agency of frogs trained for the purpose.

THE WAGTAIL

One of the things Jehangir records from the fortress of Māndu (in the present Dhar State) which he had never seen before in Hindustan was "the nest of a Wagtail (*Māmūla*) which they call in Persian *Dūm-sichā* ('Tail wagger'). Up till now, none of the hunters had pointed out its nest. By chance in the building I occupied there was its nest, and it brought out two young ones."

This wagtail would obviously be *Motacilla lugubris maderaspatensis*—the Large Pied Wagtail, which is the only resident species that breeds in India south of the Himalayas. This is the species, moreover, that is especially partial to holes in walls and buildings both empty and occupied for nesting sites.

THE PIED CRESTED CUCKOO (*Clamator jacobinus*)

Jehangir says,¹ "In Hindustan there is a bird called *Papiha* of a sweet voice, which in the rainy season utters soul-piercing (*jān-sūz*) lament. As the Koyel lays its eggs in the nest of a crow and the latter brings up its young, so I have seen in Kashmir that the *papiha* lays its eggs in the nest of the *ghaughāi* (probably some species of babbler) and the *ghaughāi* brings up its young."

Abul Fazl writes about this cuckoo as follows: "It is a smaller bird than the koel with a shorter and slenderer tail. Its love is chanted in story. It is in full song in the beginning of the rainy season and has a peculiar note, and its plaintive strain is heard oftenest at night and makes love's unhealed wounds bleed anew. It is from its note that the word *pīu* is taken, which in Hindi signifies 'Beloved.'"

THE KOEL (*Eudynamis scolopaceus scolopaceus*)

Babur says about it:—"Its length may be equal to the crow but is much thinner. It has a kind of song and is the nightingale of Hindustan. It is respected by the natives of Hindustan as much as the nightingale by us. It inhabits gardens where the trees are close planted."

¹ *Jeh.*, vol. ii, p. 164.

At a later date, Abul Fazl in his fauna of Hindustan refers to the bird as follows :—"The Koel is like a myna, jet black with crimson irides and a long tail. The romance sings of its loves as of those of the bulbul."

Jehangir's observations on the bird and its parasitic habits are remarkably thorough. He writes:—"The koel is a bird of the crow tribe but smaller. The crow's eyes are black and those of the koel red. The female has white spots but the male is all black. The male has a very pleasant voice quite unlike that of the female. It is in reality the nightingale of India. Just as the nightingale is agitated and noisy in Spring, so is the cry of the koel at the approach of the rainy season, which is the Spring of Hindustan. Its cry is exceedingly pleasant and penetrating, and the bird begins its exhalations (*masti*) when the mangoes ripen. It frequently sits on the mango trees and is delighted with the colour and scent of the mango (a fruit of which the emperor himself was inordinately fond !) A strange thing about the koel is that it does not bring up its young from the egg, but finding the nest of the crow unguarded at the time of laying, it breaks the crow's eggs with its beak and throws them out, and lays its own in the place of them and flies off. The crow thinking the eggs its own, hatches the young and brings them up. I have myself seen this strange affair at Allahabad."

THE CROW PHEASANT (*Centropus sinensis*)

Babur describes the bird¹ as follows :—"This (bird) bears some resemblance to the Carrion Crow. In the Lamghanat they call it the Wood Fowl. Its head and breast are black, its wings and tail red; its eyes a very deep red. From its being weak and flying ill, it never comes out of the woods whence it gets its name of the Wood Fowl."

PAROQUETS

On the subject of the Paroquets of Hindustan, Babur writes² "There are many species of parrot; one is that which they carry into our countries (i.e. Turkestan) and teach to talk (*Palæornis nepalensis*?). There is another species of smaller size which is also taught to speak. They call it the 'Wood Parrot' (*P. torquatus*?). Great numbers of this species are found in Bajour, Sawād and the neighbouring districts, insomuch that they go in flights of five or six thousand. These two species differ only in bulk—both have the same colours. There is another species of the parrot which is still smaller than the wood parrot. Its head is red as well as its upper feathers; from the tip of its tail to within two fingers' breadth of its feet it is white. The head of many of this species is lustrous, and they do not speak. They call it the Kashmir Parrot."

I am afraid this last bird cannot be placed with any degree of certainty though it may of course be *P. cyanocephalus*, the Blossom-headed Paroquet. This species, however, has none of the white mentioned in the description, unless the pale yellowish-green

¹ Babur, vol. ii, p. 222.

² *Ibid.*, pp. 214-15.

undertail coverts are so described. Moreover, the upper feathers are not red, unless the reference is to the wing-patches only.

Babur continues: "There is another species of parrot like the wood parrot but a little less. Its beak is red; round its neck is a broad black circle like a collar. Its upper feathers are crimson; it learns to speak well." This would appear to be *P. nepalensis*, the Large Indian Paroquet, a favourite cage bird in India, though in size it is larger, and not smaller, than *P. torquatus*.

"There is another kind of parrot of a beautiful red colour, it has also other colours, as I preciously do not recollet its appearance, I therefore do not describe it particularly. It is a very elegant bird and learns to talk; it has one great defect that its voice is particularly disagreeable as if you rubbed a piece of broken china on a copper plate."

The identity of this bird is obscure. It certainly does not appear to be *Coryllis vernalis* as suggested by King, as the colour of this species is green with scarlet patches on the rump and uppertail coverts only. Besides, I have never heard of a Lorikeet learning to talk, and its voice cannot be said to agree with Babur's graphic description. The only Indian bird that strikes me as being possibly referred to is *P. fasciatus* the Red-breasted Paroquet, which is found throughout the lower Himalayas, although its cry according to Blanford is much less harsh than that of either *P. torquatus* or *P. nepalensis*.

LORIKEET (*Coryllis vernalis*)

Once, when Jehangir was at Ajmere he narrates that "they brought a bird from the country of Zerbad (Arrakan, Sumatra, etc.) which was coloured like a parrot but had a smaller body. One of its peculiarities is that it lays hold with its feet of the branch or perch on which they may have placed it and then makes a somersault and remains in this position all night and whispers to itself. When day comes it seats itself on top of the branch. Though they say that animals have worship, yet it is most likely that this practise (whispering?) is instinctive. It never drinks water and water acts like poison upon it, though other birds subsist on water."

A curious observation indeed! In captivity at least the bird drinks freely without dire consequences.

EAGLES, KITES, FALCONS, ETC.

The *Zumej* described by Babur as being of the size of a *burquat* or falcon and of a black colour, may for all we know be the Black Hawk-eagle (*Ictinaëtus malayensis*) as suggested by King. According to the commentator *Zumej* is the Arabic name for *Dubara* or *Du-barādarān* (i.e. "Two brothers") so called because they hunt in couples. He thinks *burquat*, to the size of which the Emperor compares the bird, may be the Golden Eagle (*Aquila chrysaëtus*). In Hindi the Imperial Eagle (*A. heliaca*) is known as *Jūmiz* or *Barājūmiz*.

Babur¹ refers to another bird, the *Sar* and all he tells us about it is that "its tail and back are red." I am unable to conjecture what grounds King has for suggesting that it may be the Rosy Pastor (*Pastor roseus*). According to Mrs. Beveridge the word *Sar* in Turki means a buzzard, and this, coupled with the fact that it is included by Babur with his birds of prey, is I think good justification for the alternative surmise that the description may refer to the Brahminy Kite (*Haliastur indus*), a bird held in some esteem by the later Moghuls and looked upon as favourable omen in time of battle.

Abul Fazl, after a brief account of the birds and animals found in Kashmir, goes on² to enumerate the various attractions of the country and says: "The people take pleasure in the skiffs upon the lakes, and their hawks strike the wildfowl in mid-air and bring them to the boats; sometimes they hold them down in the water with their talons and stand on them presenting an exciting spectacle."

Fr. Monserrate, the Jesuit already referred to in the foregoing pages, writing about the popularity of the sport of hawking in the reign of the Emperor Akbar states: "The Moghuls are not very fond of hawking. It is regarded however, as a mark of royal dignity for the King to be accompanied on the march by fowlers carrying many birds on their wrists. These birds are fed on crows to save expense." It would appear from another statement of the same writer elsewhere that hunting leopards were much more popular at this period, though Abul Fazl's accounts indicate that both forms were equally in vogue.

Jehangir chronicles³ that about the year 1618 A. D. an ambassador he had sent to the King of Persia sent him an *ashyāni* falcon, meaning "a bird from the nest"—evidently much prized by falconers. He remarks that in the Persian language, such a bird is known as *Ūknā* (an Arabic word signifying "nest"). "Outwardly" the Emperor observes, "one cannot distinguish between these and the *bāz-e-dāmi* falcons by any particular mark, but after they have been flown the difference is clear."

Bāz-e-dāmi apparently means hawks reared in captivity. It is maintained that birds taken young and trained by man never attain the standard of wild birds trained by the parents.

Whenever the king visited a nobleman at his house, which, as Jehangir puts it, "increased his dignity among his equals and neighbours," it was customary for the host to offer the monarch horses, daggers, hawks and falcons the very best he possessed—which were usually exchanged by the emperor with similar presents.

Describing Kashmir, Jehangir⁴ mentions that "among the excellencies (of that Province) are the Hawks (*Janāwar-e-shikāri*). Hawks and Falcons are taken in nets. . . . It has also "nest" (*ukna*) sparrow-hawks (*bāsha*) i.e. taken from the nest and not reared (in captivity) and the nest sparrow-hawk is not bad."

¹ *Babur*, vol. ii, p. 221.

³ *Jeh.*, vol. ii, pp. 10-11.

² *Ain*, vol. ii, p. 351.

⁴ *Ibid.*, p. 178.

The information which Abul Fazl furnishes with regard to the prices current for hawks and falcons in the time of Akbar is interesting. The historian writes¹ "From eagerness to purchase and from inexperience, people pay high sums for falcons. His Majesty allows dealers very reasonable profits; but from motives of equity he has limited the prices. The dealers are to get their gain, but buyers ought not to be cheated."

We learn that the hawks were divided into various classes according to their merits, and their prices scheduled accordingly as follows:

First Class—*Khāna kurz*, i.e. Birds that had moulted whilst in charge of experienced trainers and had got new feathers. These *bāz* (hawks) cost 12 *muhurs* (equivalent to 192 rupees). There was also a second grade in this class of falcons.

Second Class—*Chōz*, i.e. Birds that had not yet moulted. The price fixed for this class was 10 *muhurs* (Rs. 160).

Third Class—*Tārinak*, i.e. Birds that had moulted before capture. These were somewhat cheaper than *Chōz*.

It will be seen that the ubiquitous profiteer is not a product of modern times, but that his nefarious activities needed curbing legislation as long ago as Akbar's day!

GREEN PIGEON

In his avifauna of Hindustan, Abul Fazl mentions the *Harial* (*Crocopus phœnicopterus*?) which he describes as having green plumage, a white bill and crimson irides and as being smaller than the ordinary pigeon.

He states: "It never settles upon the ground, and when it alights to drink it carries with it a twig which it keeps beneath its feet till its thirst is quenched."

This fanciful notion no doubt owes its origin to the exclusively arboreal habits of the bird.

Mons. de Thevenot² who visited India during the reign of the Emperor Aurangzebe, writes: "There are pigeons in that country all over green, which differ from ours only in colour: The Fowlers take them with Birdlime in this manner; they carry before them a kind of light Shed or Screen, that covers the whole Body and has holes in it to see through; the Pigeons seeing no man are not at all scared when the Fowler draws near, so that he cunningly catches them, one after another, with a Wand and Birdlime on it, none offering to fly away. In some places Parroquets are taken after the same manner."

It will be noticed that the method described by the traveller differs little from one in vogue at the present day.

THE PIGEON

The Emperor Akbar was a fervent pigeon fancier, and Abul Fazl informs us³ he kept more than 20,000 pigeons, divided into ten classes at his court.

¹ *Ain.*, vol. i, p. 259.

² *Travels into the Levant*, published A.D. 1686.

³ *Ain.*, vol. i, pp. 298-301.

In reference to these pets, Fr. Monserrate writes : " Not a little is added to the beauty of the palaces by charming pigeon-cotes partly covered with rough cast and partly showing walls built of small blue and white bricks. The pigeons are cared for by eunuchs and servant maids. Their evolutions are controlled at will when they are flying, by means of certain signals, just as those of well-trained soldiery are controlled by a competent general by means of bugles and drums. It will seem little short of miraculous when I affirm that when sent out, they dance, turn somersaults all together in the air, fly in orderly rhythm, and return to their starting point, all at the sound of a whistle. They are bidden to perch on the roof, to conceal themselves within their nesting places and to dart out of them again, and they do everything just as they are told."

This flighting of trained pigeons was known as *Ishqbāzi*.

On the subject of these pets, Akbar's chronicler writes:¹ " In former times pigeons of all kinds were allowed to couple ; but His Majesty thinks equality in gracefulness and performance a necessary condition in coupling and has thus bred choice pigeons. The custom is to keep a male and a female pigeon, if not acquainted with each other, for 5 or 6 days together, when they become so familiar that even after a long separation they will again recognize each other." Further : " At the time of departure and breaking up of the camp, the pigeons will follow, their cotes being carried by bearers (*kūhar*). Sometimes they will alight and take rest for a while and then rise again."

Jehangir makes the following observations concerning Carrier Pigeons.²

" It had been stated to me in course of conversation that in the time of the Abbaside Caliphs they taught the Baghdad pigeons, who were styled ' letter carriers ' (*nāma-bar*) and were one half larger than the wild pigeon. I bade the pigeon fanciers to teach their pigeons and they taught some of them in such a manner that we let them fly from Mandu in the early morning, and if there was much rain they reached Burhanpur by $2\frac{1}{2}$ *pahars* (watches) of the day, or even $1\frac{1}{2}$ *pahars*. If the air was very clear, most of them arrived by one *pahar* in the day and some by 4 *gharis* of the day."

A *ghari* according to Babur was equivalent to about 24 minutes. Four *gharis* would therefore mean 1 hr. 36 minutes. As the crow flies, Burhanpur is about 100 miles S.S.E. of Mandu in the Central Provinces, and this would make the speed of the birds a trifle over 60 miles an hour. According to Thomson³ a carrier pigeon can keep up 40 miles per hour for a considerable time, but this will be halved against the wind, and nearly doubled with the wind in the bird's favour. It will be noticed at once how very accurate Jehangir is on this point.

Writing some years later, in the reign of the Emperor Shah-Jehan, Manucci states with regard to pigeons:⁴ " The Mohomedans are very keen on breeding pigeons in large numbers ;

¹ *Ain.*, vol. i, p. 299.

³ *A Biology of Birds*.

² *Jeh.*, vol. i, p. 387.

⁴ *Storio do Mogor*, vol. i, p. 107.

they make them fly all together, calling out, whistling and waving with a cloth fastened at the end of a stick, running and making signals from the terraced roofs, with a view to encouraging the pigeons to attack the flock of someone else. In this way the flocks are so trained that they fight in the air. Then when the owners whistle and make the signs above described, the pigeons assemble and fly away to their homes, except a few, who losing their way in the confusion, allow themselves in their innocence to be carried along with their adversaries. It is for this end they fly these flocks, and over and over again they send them out to win more pigeons. Every owner is overjoyed at seeing his own pigeons the most dextrous in misleading their opponents."

Manucci further describes a use to which trained carrier pigeons were put by the nobles of Shah Jehan's court which, being a substitute for the modern telephone, is both amusing and ingenious. Says he,¹ "As I have said the Moghuls rear pigeons for amusement, it is necessary for me to inform the reader how they employ these pigeons to give intelligence if the King leaves his house and comes into the public hall to hold audience. Let the reader be aware then, that these nobles are very pleased not to have to move from home uselessly. Many have their dwellings far from the royal palace, about a league away. They order their retinue to be kept in readiness, first of all having sent to court a servant with two pigeons of different colours.

If the King leaves his house or holds audience, the noble's servant releases one of these pigeons at court and by reaching its home it serves as a messenger. If it is the one that denotes the King's leaving home or sitting in audience, the noble at once rides with his cavalcade in all haste to be present as is his duty. If the other comes it notifies the contrary, the retinue are dismissed and the master takes his ease at home."

THE SAND GROUSE

Babur includes in his avifauna what he calls *Baghri-kārā* of Hindustan which, he remarks, "is less than the *Baghri-kārā* of the west and slenderer; its cry too is sharper."

King suggests that the Indian bird is probably the Common Sandgrouse (*Pterocles exustus*) and the western species to which it has been compared the Black-breasted or Imperial (*P. orientalis*). In the absence of a description of Babur's bird, any conjecture as to its identity is a difficult one. Perhaps King was acquainted with the Turki name of the bird.

THE PEACOCK (*Pavo cristatus*)

Babur writes² at some length about this bird. He says: "The peacock is a beautifully coloured and splendid animal; it is less remarkable for its bulk than for its colour and beauty. Its size may be about that of a crane, but it is not so tall. On the head of the peacock and of the peahen there may be about twenty or thirty

¹ *Storio do Mogor*, vol. ii, p. 467.

² *Babur*, vol. ii, pp. 214-15.

feathers rising two or three finger-breadths in height. The peahen is neither richly coloured nor beautiful. The head of the male has a lustrous and undulating colour. Its neck is of a fine azure. Lower down than the neck its back is painted with the richest yellow, green azure and violet; the flowers or stars on its back are but small; below they increase in size, still preserving the same colour and splendour down to the extremity of the tail. The tail of some peacocks is as high as a man. Below the richly painted feathers of its tail it has another smaller tail like that of other birds, and this ordinary tail and the feathers of its side are red. It is found in Bajour and Sawād and in the countries below, but not in the Kūner or Lamghānāt or in any place higher up. It flies even worse than the *karkāwel* (pheasant) and cannot take more than one or two flights at a time. On account of its flying so ill, it either frequents a hilly country or a jungle. It is remarkable that wherever there are many peacocks in a wood, there are also a number of jackals in it, and as they have to drag after them a tail the size of a man, it may easily be supposed (? imagined) how much they are molested by the jackals in their passage from one thicket to another. The Hindustanis call it *moor*. According to the doctrines of Imām Abu Hanīfa this bird is lawful food. Its flesh is not unpleasant: it resembles that of the quail but is eaten with some degree of loathing like that of the camel."

The Emperor would appear to share the modern depreciation of the peacock as a bird for the table though in earlier days it was highly esteemed as such. Classical works contain many allusions to its high appreciation at the most sumptuous banquets, and mediæval bills of fare on state occasions nearly always included it. In the days of chivalry one of the most solemn oaths was taken on "The Peacock" which seems to have been served up garnished with its gaudy plumage.

THE JUNGLE FOWL (*Gallus ferrugineus*)

Babur observes ¹ that on the outskirts of the hillocks in Dun—the Jaswan or Una Dun—a fertile valley in the Hoshiarpur District "there are many fowls resembling barn-door fowls; they resemble them in shape but are generally of a single colour."

By "single colour" is presumably meant they were not of different or various colours as is the case with domestic fowls.

The Emperor after mentioning it as one of the common birds of Hindustan describes it thus: "The difference between the *mūrgh-e-sahrā* (or 'fowl of the wild') and the barn-door fowl is that the 'fowl of the wild' flies like a *karkāwel* (pheasant); it is not of every colour like the barn-door fowl. It is found in the hill-countries of Bajour and the hill-countries lower down. It is not met with above Bajour."

Jehangir notes ¹ that this jungle fowl was plentiful in the neighbourhood of the fort of Nūrpur ³ where one day he captured

¹ Babur, vol. ii, p. 173.

² Jeh., vol. ii, p. 226.

³ See *Imperial Gazetteer*, new edn., vol. xix, p. 232.



A FALCON.

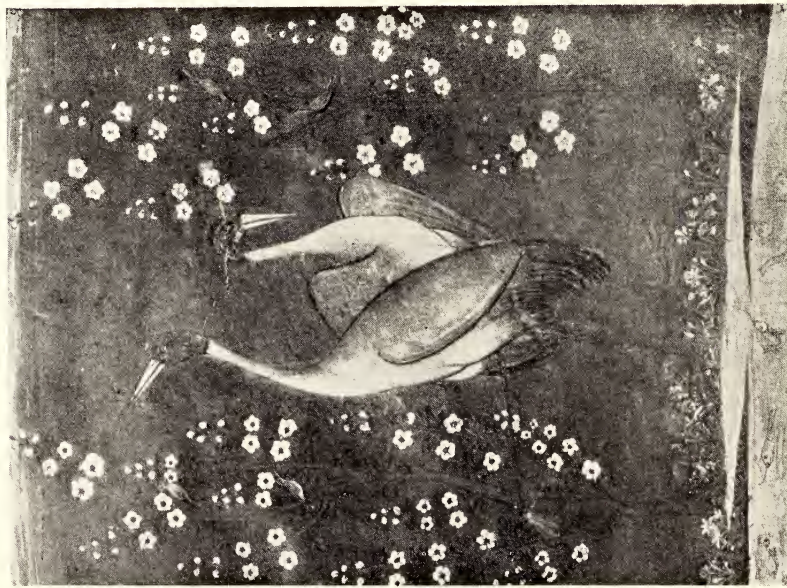
From a Moghul painting in the Prince of Wales Museum, Bombay.)



PEA FOWL.

(Probably painted by Mansur, c. A.D. 1625 ; from the collection of Baron Maurice Rothschild, Paris.)

By courtesy of the Publishers 'Indian Painting under the Moghuls'.—Percy Brown.



A PAIR OF SARUS.
(From a Moghul painting in the Prince of Wales
Museum, Bombay.)



CHEER PHEASANT. (Painted probably by Mansur, c. A.D.
1625; collection of Baron Maurice Rothschild, Paris.)
By courtesy of the Publishers, 'Indian Painting
under the Moghuls'.—Percy Brown.

four birds. He says about them: "One cannot distinguish them in shape and colour from domestic fowls. One of the peculiarities of these birds is that if they are caught by the feet and turned upside down wherever they are taken, they make no sound and remain silent contrary to the domestic fowl which makes an outcry. Until the domestic fowl is plunged into hot water its feathers do not come off easily. The jungle fowl like the partridge or *podna* (quail) can be plucked when dry. I ordered them to roast them. It was found that the flesh of the full-grown ones was very tasteless and dry. The chickens had some juiciness, but were not good to eat. They cannot fly farther than a bow-shot. The cock is chiefly red and the hen black and yellow."

PHEASANTS

Jehangir remarks that "Of the wild birds they call *Tadru* (Pheasants) till now it has never been heard that they breed in captivity. In the time of my revered father (Akbar) they made great efforts to obtain eggs and young ones, but it was not managed. I ordered them to keep some of them male and female in one place, and by degrees they bred. I ordered them to place the eggs under hens and in a space of two years 60 or 70 young were produced and 50 or 60 grew up. Whoever heard of this matter was astonished. It was said that in the Vilayet (Persia) the people there had made great efforts, but no eggs were produced and no young were obtained."

Elsewhere Jehangir mentions that a certain Zamindar of Tulwara (which according to Abul Fazl was situated in the Bari Doab Sarkar) brought him a bird which the hill people called *Jān-bahān*. "Its tail" he observes, "resembles the tail of the *qurqāwul* (pheasant) which is also called *tazru* (or *tadru* as above) and its colour is exactly like that of a hen pheasant, but it is half as large again. The circle round the eyes of this bird is red while the orbit of the pheasant is white. The said Basoi (the Zamindar) stated that this bird lived in the snow mountains and that its food was grass and other stuff. I have kept pheasants and have reared young ones and have often eaten the flesh of both young birds and mature ones. One may say that there is no comparison between the flesh of the pheasant and this bird. The flesh of the latter is much more delicate."

The bird referred to in the above narrative is no doubt the Cheer Pheasant (*Catreus wallichi*). One of the vernacular names quoted by Blanford is *Chā mān* which may well be a corruption or variation of Jehangir's *Jān-bahān*. As a bird for the table it may be noted that Blanford considers it far inferior to the Koklass.

The Emperor had a sketch of the bird made at the time. The plate—here reproduced—is said probably to be the handiwork of the celebrated animal painter Al Mansur. Though the picture may appear somewhat stiff and "wooden" if judged from the modern Gronvöldian standard, it leaves little doubt as regards the identity of the species.

THE MONAUL PHEASANT (*Lophophorus impejanus*)

Babur¹ mentions the *Lujeh* or *Lukeh* which bird according to him was also called *Būkalemūn*. It is described as follows: "From the head to the tail it has four or five colours. Its neck has a bright glancing tinge like a pigeon's. Its size may be equal to the *Kabk-e-dūrri* (*Tetrogallus caspius*). It may be regarded as the *kubk-e-dūrri* of Hindustan. As the *kubk-e-dūrri* inhabits the summits of mountains, this also inhabits the tops of mountains. They are met with in the country of Kabul and the hill-country of Nijrau and from thence downward, wherever there are hills, but they are not found any higher up."

In a footnote, Sir Lucas King comments on the above as follows: "This may be the Monaul Pheasant (*Lophophorus impejanus*), though *Bukalemun* is the Persian word for the turkey. The *kabk-e-dūrri* is much larger than the common *kabk* of Persia and is peculiar to Khorasan—*Tetrogallus caspius*. It is said to be a beautiful bird. The common *kabk* of Persia is the Chukor of India (*Caccabis chukor*)."

The present habitat of this bird, which was till not very long ago common about Mussoorie and Simla, is throughout the Himalayas from Bhutan to Kashmir and even further west. The bird has been recorded from Chitral and from the Safed Koh in Afghanistan. It occurs also in Sikkim.

What Jehangir² refers to in the following words may also very probably this bird. He says, "Another bird is of a golden (resplendent ?) colour called in Lahore *Shan*. The Kashmiris call it *Put*. Its colour is like that of a peacock's breast. Above its head is a tuft (*kakul*). Its tail of the width of 5 fingers is yellow, and is like the long feather (*Shāh par*) of the peacock, and its body is as large as that of a goose. The neck of the goose is long and shapeless; that of this one is short and has a shape."

THE TRAGOPAN (*Tragopan*, sp.)

Babur³ describes this pheasant as follows: "Another bird is the *Pālpeikar* (i.e. 'Flower-faced'). Its size is equal to that of the *kubk-e-dūrri* (*Tetrogallus caspius*). Its figure resembles the dung-hill cock, and in colour it is like the hen. From its forehead down to its breast it is a beautiful scarlet colour. The *Phulpeikar* inhabits the hill-country of Hindustan."

Jehangir⁴ describes the *Phulpeikar*—one of the birds he saw in the hill-country (of Kashmir)—which the Kashmiris called *Sonlu*, as follows: "It is $\frac{1}{3}$ less than a peahen. The back, tail and wings resemble those of the bustard, and are blackish with white spots. The breast to the end of the bosom is black with white spots and some red ones. The ends of the feathers are fiery red and very lustrous and beautiful. From the end of the back of the neck it is also brilliantly black. On the top of its head it has two fleshy

¹ Babur, vol. ii, p. 216.³ Babur, vol. ii, p. 218.² Jeh., vol. ii, p. 220.⁴ Jeh. vol. ii, p. 220.

hornś of a turquoise colour. The skin of its orbits and round its mouth is red. Below its throat there is a skin round it enough to cover the palms of two hands, and in the middle of this the skin is of a violet colour of the size of a hand, with blue spots in the middle. Around it, each streak is of a blue colour, consisting of 8 plumes (?); round the blue streak it is red to the breadth of two fingers like the peach flower, and again round its neck is that blue coloured streak: it has red legs also. The live bird which was weighed came to 152 tolas. (3 lbs. 13 oz.) After it was killed and cleaned it weighed 139 tolas."

QUAILS

On this subject Babur says: "The *Budineh* (Quail) is not peculiar to Hindustan, but there are 4 or 5 species of it peculiar to that country. There is one species that visits our countries.¹ It is larger and more spreading than the common *budineh* that visits us. Its wings and tail are reddish. This *budineh* goes in flights like the chir (*Catreus walichii*). The bird referred to is no doubt the Bush Quail (*Perdica* sp.).

Babur continues: "There is still another species which is smaller than the *budineh* that visits our country. They are generally black on the throat and breast. There is another species which seldom visits Kabul. It is small, somewhat larger than a *kharcheh* (wagtail). In Kabul they call it *Kuratu*."

The former bird is obviously the Rain Quail (*Coturnix coromandelica*) and the latter may be—it is difficult to say—the Lesser Button Quail (*Turnix dussumieri*). The thoroughness with which Babur has dealt with this family of game birds is apparent, and bespeaks an interest and knowledge possessed only by an exceptionally keen observer.

THE SEE-SEE PARTRIDGE (*Ammoperdix griseigularis*)

Writing from camp at the fort of Rohtas (Punjab) Jehangir notes in his diary as follows:—"At this stage *Tihū* were obtained. The flesh of the *Tihū* is better than that of the *kabk*" (partridge or chukor).

It may be mentioned that *Tihū* is still one of the names by which this little partridge is known in some parts.

THE BLACK PARTRIDGE (*Francolinus vulgaris*)

The Emperor Babur refers to this bird as the *Dūrraj*² and says "It is not peculiar to Hindustan. It is found everywhere in the countries of the Garmsil³ but as certain species of it are found only

¹ i.e. the countries north of the Oxus. As suggested by King, this migratory species may probably be the Common Grey Quail (*Coturnix coturnix*). Babur, vol. ii, p. 219, footnote.

² According to Mrs. Beveridge, *Dūrraj* in Arabic means "one who repeats what he says"; a "tell-tale."

³ Afghanistan

in Hindustan, I have included it in this enumerative description. The partridge may be equal to the *kabk-e-dūrri* in size.¹ The colour of its beak is like that of the female of the *mūrgh-e-dashti* (Jungle Fowl). Its neck and breast are black, with white spots. On both sides of both its eyes is a line of red. It has a cry of *shir-dārem-shakrek* ('I have milk and a little sugar'). From its cry it gets its name. It pronounces *shir* short, *dārem-shakrek* it pronounces distinctly. The colour of the hen resembles that of a young *karkawel* (pheasant). They are found below Nijrau."

Jehangir records having met this bird in the stony country near the village of Bakkar (Sind) in the course of one of his periodical marches to Kashmir about the year A.D. 1620.

THE GREY PARTRIDGE (*Francolinus pondicerianus*)

What appears very likely to be this bird is described by Babur thus :—" There is another kind of fowl of the partridge kind which they call *kanjel*. It is about the size of a *kabk*. Its cry is very like that of a *kabk* (chukor) but shriller. There is little difference in colour between male and female. It is found in the country of Peshawar, Hashnagar and in the countries lower down but in no higher district."

Abul Fazl mentions that partridges in Kashmir afforded good sport. They were probably hunted with hawks—a form of sport which is still extremely popular in Hindustan.

Jehangir relates that one day while hunting, he saw a *tuyghun* or albino partridge such as he had never before seen, which he caught with a hawk that likewise happened to be an albino. He² continues : "I ascertained by trial that the flesh of the black partridge (ordinarily coloured ?) was better than that of the white. . . ."

THE CRANE

Jehangir describes a *Kulang*³ hunt with falcons, a sport, he states, of which his son Shah Jehan was particularly fond. The birds employed on this occasion were *Shāhīn* (either *Falco peregrinator* or *F. barbarus*) He relates : " At Shah Jehan's request I rode out early in the morning and caught one *dūrna* (crane) myself whilst a falcon my son had on his wrist caught another. Certainly of all good hunting amusements this is the best. I was exceedingly pleased with it. Although the Sarus is large, it is lazy and heavy on the wing. The chase of the *dūrna* has no resemblance to it. I praise the heart and courage of the falcon that can sieze such strong bodied animals, and with the strength of his talons subdue them. Hassan Khan, chief huntsman of my son was honoured with an elephant, a horse and a dress of honour as a reward for his exhibition of sport, and his son also received a horse and a dress of honour."

¹ Apparently here only *kabk* (chukor) is meant, as we have been told above that the *kubk-e-dūrri* is the size of the Monal Pheasant.

² *Jeh.*, vol. ii, p. 284.

³ Either *Grus communis* or *Anthropoides virgo*.

The Emperor records¹ that once while hunting waterfowl in Kashmir, a boatman caught and brought him a young Demoiselle Crane(?)

"It was very thin and miserable" continues the royal naturalist, "It did not live longer than a night. The *qarqarā* (Demoiselle Crane?—perhaps from its cry) does not live in Kashmir. This had become ill and thin at the time of coming from, or going to Hindustan and had fallen there."

The last passage would tend to indicate that the Emperor was well acquainted with the fact of bird migration.

THE SARUS CRANE (*Grus antigone*)

Babur² describes this bird as follows: "The Turks who are in Hindustan call the Sarus *Tiweh türneh* (Camel crane). It is a little less than the *ding* (Adjutant). Its head is red. They keep it about their houses and it becomes very tame."

Jehangir appears to have entertained a special regard for this bird, concerning which his observations and notes are particularly exhaustive. The reputed devotedness of the pair to one another and their attachment to their young seems to have particularly arrested his fancy. He relates that once when encamped in the neighbourhood of Deogaon (Gujarat) one of his eunuchs caught two young sarus on the bank of a large tank hard by. "At night" he notes, "two large sarus appeared making loud cries near the *ghusal khana* (lit. 'Bath chamber') which they had placed (erected) on the edge of the tank, as if somebody were exercising oppression on them. They fearlessly began their cries and came forward. It occurred to me that certainly some kind of wrong had been done to them, and probably their young had been taken. After enquiry was made, the eunuch who had taken the young sarus brought them before me. When the sarus heard the cries of the young ones, they without control threw themselves upon them, and suspecting they had had no food, each of the two sarus placed food in the mouths of the young ones and made much lamentation. Taking the young ones between them, and stretching out their wings and fondling them, they went off to their nest."

The Emperor has recorded some extremely useful and interesting notes concerning the breeding habits of the sarus, from pairing onwards, to the time the young were hatched, which I think deserve to be quoted *in extenso*. They bespeak the keen and lively interest of the writer in his subject, and their minuteness and accuracy are such as would do justice to any modern work on Natural History.

He writes:³ "At this time the pairing of the sarus which I had never before seen, and is reported never to have been seen by man, was witnessed by me. The sarus is a creature of the crane genus, but somewhat larger (*dah dūwazdeh*, lit., ten, twelve, i.e. its is $\frac{1}{5}$ larger). On the top of the head it has no feathers, and the skin is drawn over the bones of the head.

¹ *Jeh.*, vol. ii, p. 176.

² *Babur*, vol. ii, p. 220.

³ *Jeh.* vol. ii, p. 16.

From the back of the eye to six fingers breadths of the neck it is red. They mostly live in pairs on the plains, but are occasionally seen in flocks. People bring a pair from the fields and keep them in their houses and they become familiar with men. In fact there was a pair of sarus in my establishment to which I had given the names of Laila and Majnun (the 'Romeo and Juliet' of Persian story and song). One day a eunuch informed me that the two had paired in his presence. I ordered that if they showed an inclination to pair again they should inform me. At dawn he came and told me that they were about to pair again. I immediately hastened to look on. The female having straightened its legs, bent down a little: the male then lifted one of its feet from the ground and placed it on her back, and afterwards the second foot, and immediately seating himself on her back paired with her. He then came down, and stretching out his neck, put his beak on the ground and walked once round the female. It is possible they may have an egg and produce a young one. Many strange tales of the affection of the sarus for its mate have been told. The following case has been recorded because it is very strange. Qiyam Khan, who is one of the *Khanzadas* (house-born ones) of this court, and is well acquainted with the arts of hunting and scouting, informed me that one day he had gone out to hunt and found a sarus sitting. When he approached, it got up and went off. From its manner of walking he perceived signs of weakness and pain. He went to the place where it had been sitting. He threw a net round it and drew himself into a corner, and it tried to go and sit in the same place. Its foot was caught in the net and he went forward and siezed it. It appeared extremely light, and when he looked minutely he saw there were no feathers on its breast and belly; a handful of feathers and bone came into his hand. It was clear that its mate had died, and that it had sat there from the day it lost its companion. Himat Khan, who is one of my best servants, and whose word is worthy of reliance, told me that in the Dohad Parganna (Gujerat) he had seen a pair of Sarus on the bank of a tank. One of his gunners shot one of them and in the same place cut off his head and stripped it of its feathers. By chance we halted two or three days at that place, and its mate continually walked round it and uttered cries of lamentation. 'My heart,' he said, 'ached at its distress but there was no remedy for it save regret.' By chance, twenty-five days afterwards he passed by the same spot and asked the inhabitants what had become of the sarus. They said it died on the same day and there were still remains of feathers and bones on the spot. He went there himself and saw it was as they said. There are many tales of this kind among the people which it would take too long to tell."

A few days later, Jehangir continues his diary: "... the sarus, pairing of which has been related in the preceding pages, collected together some straw and a little rubbish in the little garden and laid first of all one egg. On the third day after this it laid a second egg. This pair of sarus were caught when they were about a month old and had been in my establishment five years. After 5½ years they paired and continued doing so for a month; on the

21st of the month of Amurdad, which the Hindus call Savan (*Shravan*: August-September) the hen laid the eggs. The female used to sit on the eggs the whole night alone, and the male stood near her on guard. It was so alert that it was impossible for any living thing to pass near her. Once a large weasel (mungoose) made its appearance and he ran at it with the greatest impetuosity and did not stop till the weasel got into a hole. When the sun illuminated the world with its rays the male went to the female and pecked her back with his beak. The female then rose and the male sate in her place. She returned and in the same manner made him rise and seated herself. In short the female sits the whole night and takes care of the eggs and by day the male and female sit by turns. When they rise and sit down, they take great precautions that no harm shall come to the eggs.'

The Emperor continues his observations as follows: "From Sunday 3rd till the eve of Thursday the 7th rain fell. It is strange that on other days the pair of sarus sate on the eggs five or six times in turns, but during this 24 hours when there was constant rain and the air was somewhat cold the male, in order to keep the eggs warm, sate from early in the morning till mid-day, and from that time till the next morning the female sat without an interval for fear that in rising and sitting again, the cold air should affect them and the eggs become wet and be spoilt. Briefly, men are led by the guidance of reason, and animals according to Divine Wisdom implanted in them by Nature. Stranger still is it that at first they keep their eggs together underneath their breast, and after 14 or 15 days have passed they leave a little space between them for fear that the heat should become too great from their contact with each other. Many become addled in consequence of (too great) heat."

Further, "On the eve of Thursday the 21st the sarus hatched one young one, and on the eve of Monday the 25th a second; that is, one young was hatched after thirty-four days and the other after thirty-six days (from the time the first egg was laid or also thirty-four days for this). One might say that they were $\frac{1}{10}$ th larger than the young of a goose, or equal to the young of a peafowl at the age of a month. Their skin was of a blue colour. On the first day they ate nothing and from the second day the mother taking small locusts (grasshoppers) in her mouth sometimes fed them like a pigeon, or sometimes like a fowl threw them before them to pick up of themselves.

If the locusts were small it went off well, but if they were large she sometimes made two or three pieces of it so that the young ones might eat it with ease. As I had a great liking for seeing them I ordered them to be brought before me with every precaution that no harm might happen to them. After I had seen them I ordered them to be taken back to the little garden inside the royal enclosure, and to be preserved with the greatest care, and that they should be brought to me again whenever they were able to walk."

The diary continues a few days later: "... At first the male sarus used to hold its young one by its leg upside down in its beak, and there was a fear that he may be unkind to it and it might be